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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,895	02/03/2004	Kurt A. Habecker	99024CIPDIV2 (3600-234-03)	1073
7590 11/22/2005			EXAMINER	
Martha Ann Finnegan, Esq. Cabot Corporation 157 Concord Road Billerica, MA 01821-7001			MAI, NGOCLAN THI	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/770,895

Applicant(s)

HABECKER ET AL.

Examiner

Ngoclan T. Mai

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1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 28-33 and 44-89 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 71-89 is/are allowed.
- 6) ☒ Claim(s) 28-33, 46-49, 54 and 59-70 is/are rejected.
- 7) ☒ Claim(s) 44, 45, 50-53 and 55-58 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 2/3/04, 4/14/04, 3/11/05, 6/30/05

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The restriction requirement is withdrawn in view of applicant's argument filed 6/30/05.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 28, 31, 48, 59, and 61-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Tripp (U.S. Patent No. 6,515,846).

The patent discloses niobium powder and capacitor anode comprising the powder, wherein the powder has carbon, iron, nickel and chromium contents as recited in claim 28, see TABLE XI. As for claim 48, see Table XI.

3. Claims 28, 30, 31, 33, 46-49, 54, and 59-70 are rejected under 35 U.S.C. 102(e) as being anticipated by Shekhter et al (U.S. Patent No. 6,171,363 B1).

Shekhter et al's teaching anticipates claims 28, 30, 46-47 and 54 that Shekhter et al disclosed niobium powder having carbon content of 40 ppm, Fe/Ni/Cr content of 93 ppm, and surface area of 40,900 cm<sup>2</sup>/g (4.09 m<sup>2</sup>/g), see Table 8.1 and carbon content of 166 ppm, Fe/Ni/Cr content of < 154 ppm with surface area of 22,000 cm<sup>2</sup>/g (2.2 m<sup>2</sup>/g), see Table 10.1. Shekhter et al taught the powder are for making capacitor anode (claims 30 and 31), see abstract. The capacitor anode taught by Shekhter et al, which is formed of niobium powder as claimed would inherently have the claimed formation voltage and working voltage as recited in claims 69-70.

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Regarding the limitations of claims 48 and 59-60, the niobium powder contains both oxygen and phosphorus with oxygen content of 13000 ppm and 7490 ppm, which disclosed in col. 9, lines 8+, Table 8.1 and col. 10, lines 3+, Table 10.1.

Regarding claim 49, Shekhter et al disclosed the claimed limitation in col. 9, lines 27-34.

As for claims 61-62, Shekhter et al disclosed the claimed limitation in Table 8.1 and Table 10.1.

Regarding claims 63 and 65, Shekhter et al disclosed the claimed limitation in Table 10.2, first sample.

Regarding claims 66-68, Shekhter et al disclosed the claimed limitation in col. 10, lines 8-10 and Table 10.2.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tripp.

Tripp discloses niobium powder having the claimed iron, nickel and chromium contents. The difference between the claim and Tripp is that Tripp disclosed the carbon content of 154 ppm instead of about 150 ppm as claims. While the amount is not overlapping that is claimed by the applicants, however it has been established that a prima facie case of obvious exists where the claimed ranges and the prior art ranges do not overlap but are closed enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 779 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985)

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6. Claims 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shekhter et al.

Shekhter et al disclosed niobium powder having the claimed iron, nickel and chromium contents. The difference between the claim and Shekhter et al. is that Shekhter et al. disclosed carbon content of 40 ppm in table 8.1 and 166 ppm in Table 10.1 instead of about 50 to about 150 ppm as claims. While the amount is not overlapping that is claimed by the applicants, however it has been established that a prima facie case of obvious exists where the claimed ranges and the prior art ranges do not overlap but are closed enough that one skilled in the art would have expected them to have the same properties.

*Titanium Metals Corp. of America v. Banner*, 779 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

7. Claims 44-45, 50-53, 55-58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


8. Claims 71-89 are deemed allowable because none of cited prior art discloses hydrided niobium powder having the claimed C, Fe, Ni and Cr content.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoclan T. Mai whose telephone number is (571) 272-1246. The examiner can normally be reached on 9:30-6:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ngoclan T. Mai  
Primary Examiner  
Art Unit 1742

n.m.